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# A NEW GENUS AND A NEW SPECIES OF BRACONINAE (HYMENOPTERA, BRACONIDAE) FROM CHINA

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Abstract In this paper, a new genus and a new species of Braconinae (Hymenoptera, Braconidae) are described and illustrated from China, i. e. *Platybracon* gen. nov. and *Platybracon sinicus* sp. nov. The type specimens are deposited in the Benificial Insects Lab, College of Plant Protection, Fujian Agriculture and Forestry University, China.

Key words Hymenoptera, Braconidae, Braconinae, new genus, new species, China.

An undescribed genus of the subfamily Braconinae Nees, 1812 (Hymenoptera, Braconidae) was discovered in China. Its mesoscutum with dense and even setae, propodeum with a complete mid-longitudinal carina, basal lobes of claws present, forewing veins C + SC + R and 1-SR forming an angle more than 60 °, hindwing without any trace of vein 2-1A, first metasomal tergite with strong dorsolateral carinae, second metasomal tergite with a pair of short sublateral longitudinal grooves, because of these characters it is placed in the *Plesiobracon*-group.

The biology of the new genus is unknown, but members of the *Plesiobracon*-group have been reared from Momphidae or Cecidomyiidae galls, from larvae of Hispidae or Gracillariidae or are known even to feed on ant brood (Quicke & Shaw, 2004).

For the identification of the group *Plesiobracon* and its associated genera, keys by van Achterberg (1983) and Quicke (1987, 1988), and for the terminology used in this paper (see van Achterberg, 1988, 1993).

## Platybracon gen. nov.

Type species: *Platybracon sinicus* sp. nov.

Diagnosis. Body evenly setose; head granulate dorsally; scapus compressed and moderately robust, gradually narrowed basally, shorter ventrally than dorsally in lateral aspect (Fig. 6), and its inner margin single; pedicellus subcylindrical (Fig. 6); frons mainly flat and with a distinctly deep median groove (Fig. 4); eyes glabrous and not emarginated (Fig. 5); face microsculptured, with a median ridge dorsally (Fig. 5); clypeus with dorsal carina; malar suture deeply impressed (Fig. 5); labio-maxillary complex hardly protruding (Fig. 9). Pronotum with crenulate grooves in lateral aspect (Fig. 9); propleuron with a crenulated groove before postero-lateral margin; notauli completely impressed, crenulate anteriorly and gradually weaken posteriorly (Fig. 3); scutellar sulcus deep and wide, strongly crenulate (Fig. 3); metanotum narrow, protruding and with a median carina anteriorly (Fig. 3); propodeum with a complete median carina and rugulose (Fig. 3); propodeal spiracle round, near middle of propodeum and without tubercle connected it (Fig. 9). Angle between veins 1-SR and C + SC + R of forewing about 80 °, 1-SR slender and long (Fig. 1); 1-SR + M slightly curved; cu-a somewhat postfurcal (Fig. 1); CU1b moderately reclivous and slender (Fig. 1); 1-R1 much longer than pterostigma, ending near apex of forewing and distad of apex of 3-M; 3-CU1 of slender and straight; r about equal to width of pterostigma and 2-SR (Fig. 1); second submarginal cell slightly narrowing apically; 2-SR straight. 2-SC + R of hindwing longitudinal (Fig. 1); hindwing with one bristle on C + SC + R baso-anteriorly (Fig. 1); membrane near cu-a of hindwing setose. Tarsal claws with small lobe, setose (Fig. 7); tarsal segments normal and with medium-sized setae apically; fore tibia with one spur and 0.5 times of fore basitarsus. First metasomal tergite movably joined to second tergite, distinctly reticulate-rugose medio-posteriorly and with a median carina (Fig. 8), with deep medio-basal groove, in lateral view low basally (Fig. 9), with distinctly dorsal carinae (Fig. 8), its medial area convex, dorso-lateral carinae absent posteriorly; second tergite without a medio-basal area but with a strong median carina and distinctly flexural sublateral grooves (Fig. 8); second metasomal suture deep and crenulate (Fig. 8); third tergite with sublateral grooves basally (Fig. 8); second to sixth tergites distinctly reticulate-rugose (Fig. 9); fourth to sixth tergites with deep and strongly crenulated anterior grooves; sixth tergite with distinctly subposterior groove; ovipositor rather short, upper valve of it distinctly expanded (Figs. 2, 9), and lower valve without serration subapically; ovipositor sheath normally setose (Fig. 9); hypopygium acute apically (Fig. 9).

Distribution. Oriental (China), one species.

Etymology. From "platys" (Greek for "expanded, broad") and the generic name "*Bracon*", because of strongly expanded ovipositor apically in lateral aspect.

Note. The new genus is close to the *Philomacroploea*

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Cameron, 1905 because of the reticulate-rugose on metasomal tergites, median carina on first and second tergites and rather short ovipositor. But it dose not fit in the latter genus because of the new genus without first and second metasomal tergites immovably joined and sixth tergite without semi-circularly emarginated medio-apically. And in the *Plesiobracon*-group the new genus is similar to *Crinibracon* Quicke, 1988 because of the mesoscutum densely and evenly setose; tarsal claws with small basal lobes which are weakly angled distally; the first tergite posteriorly and second tergite with a mid-longitudinal carina; ovipositor shorter than metasoma, more or less strongly expanded apically in lateral aspect; the second tergite is without converging grooves; the notauli are complete, and the metanotum and propodeum have a median carina. But it differs from the later by second metosomal tergite with a pair of flexural sublateral grooves; length of vein r of forewing about being equal to vein 2-SR of forewing; posterior margin of sixth tergite without broad emarginated medially; vein 1-M of forewing gradually thickening and slightly curved. It runs to the genus *Simplicibracon* Quicke, 1988 because of the metasomal tergites largely with areolate-rugose; notauli rather deeply impressed along complete length of the mesoscutum; pronotum with crenulate grooves in lateral aspect; pleural suture weakly impressed, smooth. But in the new genus, ovipositor strongly expanded apically in lateral aspect; vein 2-SC + R of hindwing longitudinal; first tergite posteriorly and second tergite with a mid-longitudinal carina, respectively; third to fifth tergites without transverse, crenulate subposterior and subbasal grooves. The *Plesiobracon* Cameron, 1903 shares the propodeum with a complete median carina; pair of grooves on second tergite present; mesoscutum densely and evenly setose; posterior margin of sixth tergite without a medial emargination, but the ovipositor longer than the body; second tergite without a median carina; fourth tergite protruding medio-apically; first tergite without dorsal carinae.

### *Platybracon sinicus* sp. nov. (Figs. 1-9)

Holotype ♀, length of body 3.6 mm, of fore wing 3.8 mm, of ovipositor 0.3 mm.

Head. Antenna missed beyond 11 segments, third segment 1.2 times longer than fourth segment, length of the following segments being equal to their maximum width, respectively; length of maxillary palp 0.6 times height of head; in dorsal view length of eye twice temple; temples gradually narrowed behind eyes (Fig. 4); face with dense and even setae, microsculptured, with a median ridge dorsally (Fig. 5); height of clypeus: inter-tentorial distance: tentorio-ocular distance = 4 : 11 : 5; height of face: shortest distance between eyes: maximum dimension across eyes = 5 : 9 : 18; clypeus smooth; length of malar space 1.3 times basal width of mandible; frons setose and granulate, with a deep median groove (Fig. 4); POL : OOL : OD = 4 : 5 : 3; occiput densely and evenly setose.

Mesosoma. Length of mesosoma 1.5 times its height; mesoscutum densely setose; notauli completely impressed, crenulate anteriorly and gradually weaken posteriorly (Fig. 3); scutellar sulcus deep and wide, strongly crenulate (Fig. 3); scutellum morderately setose; mesopleuron moderately setose; pleural suture weakly impressed, smooth (Fig. 9); metanotum narrow, protruding and with a short median carina anteriorly (Fig. 3); metapleuron long setose; propodeum with a complete median carina and rugulose (Fig. 3), glabrous in medio-posterior area.

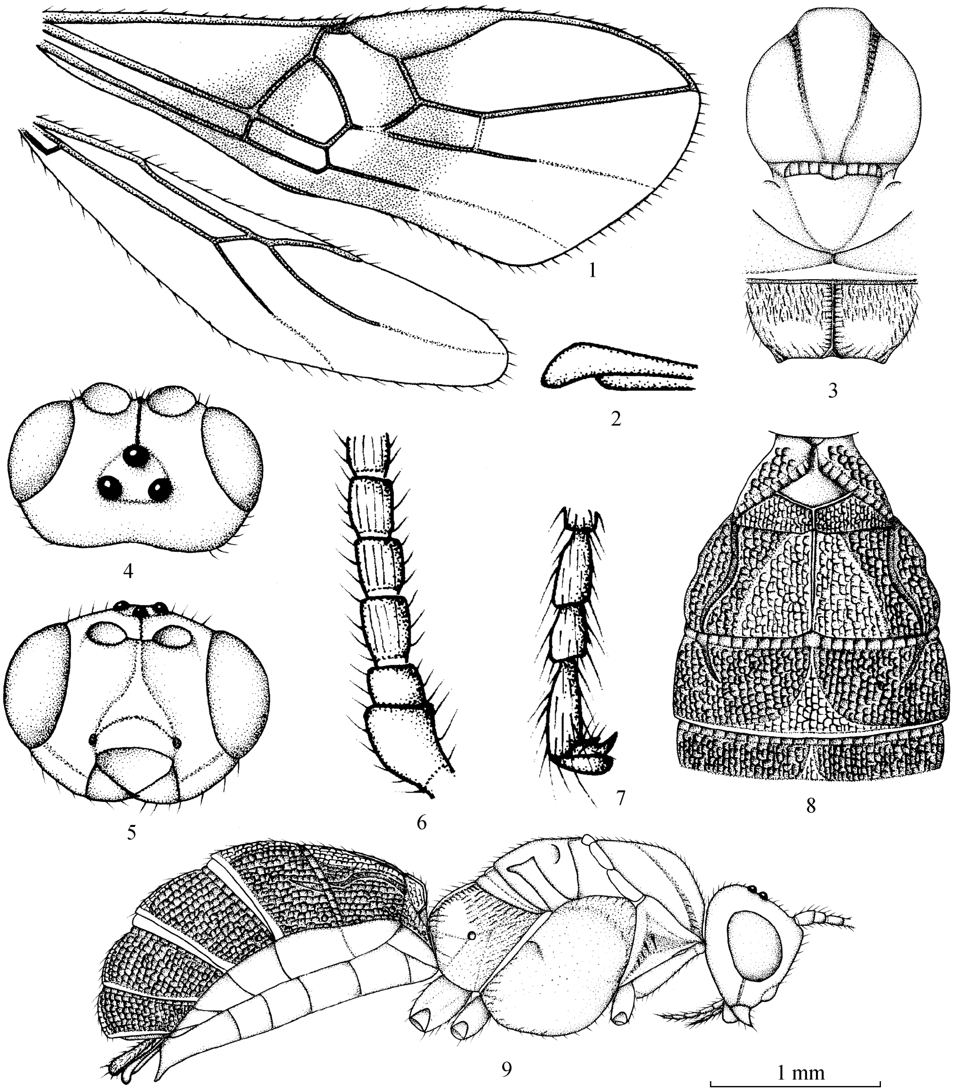
Wing. Fore wing (Fig. 1), r : 3-SR : SR1 = 12 : 17 : 55; 2-SR : 3-SR : r-m = 12 : 17 : 8; m-cu parallel to 1-M and about 0.5 times as long as 1-M. Hind wing (Fig. 1), M + CU : 1-M : 1r-m : 2-SC + R = 4 : 23 : 4 : 16; 1r-m of hindwing moderately long, about 0.5 times as long as SC + R1.

Legs. Length of fore femur : tibia : tarsus = 10 : 11 : 4; fore basitarsus 6.1 times longer than apically deep; Length of hind femur : tibia : basitarsus = 6 : 8 : 3; hind tibial spurs 0.25 and 0.30 times as long as hind basitarsus.

Metasoma. Length of first tergite 0.6 times its apical width, its surface reticulate-rugose medio-posteriorly and with a median carina, laterally rugose (Fig. 8); second tergite without a medio-basal area but with a strong median carina and distinctly flexural sublateral grooves (Fig. 8), surface of second tergite reticulate-rugose (Fig. 8), maximum width of tergite about 2.4 times longer than median length; third tergite 3.3 times wider than its median length, with sublateral grooves basally (Fig. 8); third to sixth tergites distinctly reticulate-rugose (Fig. 9), without antero-lateral grooves and subposterior grooves; length of ovipositor sheath about 0.08 times fore wing.

Colour. Dark brown; head (except for antenna, stemmaticum), postero-lateral corner of pronotum, posterior half part of middle lobe of mesoscutum, anterior margin of lateral lobes of mesoscutum, scutellum, first metasomal tergite (except for postero-lateral area), triangular area in median part of second tergite, area before anterior groove, posterior margin and triangular medio-posterior area of third to fifth tergites, sixth tergite, legs (except for hind coax and tarsal claws) yellow; wing membrane weakly infuscate, middle part of forewing with two brown bands (Fig. 1), pterostigma, parastigma and veins dark brown.

Male. Antenna with 25 segments; sublateral grooves of the second metasomal tergite eflected; labio-maxillary complex, leg (except for tarsus claws) and medio-posterior area of first and second tergites light yellow, the rest dark brown; patches on middle part of forewing light



Figs. 1-9. *Platybracon sinicus* gen. nov. et sp. nov. , ♀, holotype. 1. Wings. 2. Apex of ovipositor, lateral apect. 3. Mesosoma, dorsal aspect. 4. Head, dorsal aspect. 5. Head, frontal aspect. 6. Four basal segments of antenna, lateral aspect. 7. Outer hind claw. 8. First to third metasomal tergites, dorsal aspect. 9. Habitus, lateral apect. Scale bars: 1 = 1 mm; 4, 5 = 0.62 mm; 9 = 1.1 mm; 3, 8 = 2.0 mm; 2, 6-7 = 3.0 mm.

brown.

Holotype ♀, Huanggangshan, Mt. Wuyi, Fujian, 22 July 1981, collected by Shangguan Chengliang. Paratype 1 ♂, Xishuangbanna, Yunnan, 18 Sep. 1988, collected by HUANG Ju-Chang.

Distribution. Fujian, Yunnan.

Biology. Unknown.

Etymology. The specific name is derived from Greek "Sino", referring to Chinese.

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# 中国茧蜂亚科一新属一新种（膜翅目，茧蜂科）

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**摘　要**　记述茧蜂亚科 1 新属 1 新种，即阔鞘茧蜂属 Platybracon gen. nov. 和中华阔鞘茧蜂 Platybracon sinicus sp. nov.。文中对新属及新种进行了详细的描述，并附有鉴别形态特征图，新属与其近似属作了比较。模式标本存放于福建农林大学益虫研究室。

**关键词**　膜翅目，茧蜂科，茧蜂亚科，新属，新种，中国.
**中图分类号**　Q969.54